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Letter Ruling 10-3: Sales Tax on Machinery Used to Construct a Wind Turbine

July 7, 2010

I. INTRODUCTION

You ask for a letter ruling regarding the application of Massachusetts sales and use taxes to purchases of machinery used in the construction of a wind turbine project known as ***** (the Project) by ***** ("Taxpayer") in *****, Massachusetts. In support of your request, you state the following facts.

II. FACTS

The Project began in 2004 and has since gained all necessary permits to install one wind turbine, located on a remote hilltop site in ***** ("Technology Park") to generate electricity. Taxpayer has executed contracts to purchase a turbine (**** Model ****), which will have a rated capacity (i.e., maximum output) of 1,650,000 Watts, or 1.65MW, from Massachusetts Clean Energy Center (former Massachusetts Renewable Energy Trust), a quasi-public agency.

As required by the bylaws of the Town of ***** ("Town"), the turbine is an accessory to a business. It will be connected "behind the meter" at a 17,000 square foot commercial building located at *****, MA. This building and land is owned by *****, ("Realty Trust"). The building is leased to an unrelated third party. Taxpayer will lease the turbine site from Realty Trust.

Realty Trust will purchase electricity from Taxpayer. Some of this electricity will be resold to the unrelated third party, an industrial publicly traded company which employs 40 persons. On an annual basis, approximately 5% of the turbine output will be consumed on-site by the industrial tenant. The remainder of the electricity will be purchased by ***** (Local Utility) for use by other consumers [1]. All of the transfers will take place over electrical lines.

Pursuant to a Purchase and Sale Agreement entered into between the Massachusetts Clean Energy Technology Center (CEC), a corporation organized under G.L. c. 23J, and the administrator of the Massachusetts Renewable Energy Trust Fund (the Fund) and Taxpayer, Taxpayer will purchase, among other items that are not the subject of this ruling request, the following:

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1. Turbine and related items

(a) One (1) Model X 1,650-kW WTG turbine with the following:

- (1) rotor blades, rotor hub and fastening hardware;
- (2) internal nacelle crane to hoist tools, gear oils, etc.;
- (3) base (ground) and nacelle control panels;
- (4) electrical power, grounding and communication cables for connection between ground control panel and nacelle equipment (all exposed "not-in cabinet" power cables to be labeled and marked as rated for 600 V or higher);
- (5) 115-V convenience outlets in ground and nacelle control panels with ground-fault-interrupter (GFI) breakers for safety (meeting NEC codes or UL approved); and
- (6) WTG electrical equipment suitable for 60Hz.

2. Tower and related items

(a) One (1) eighty (80) meter hub height three section tubular steel Tower including the following items:

- (1) Tower fasteners (nuts, bolts, washers) for connection of internal Tower flanges (excluding Tower foundation bolts) and Tower-to-nacelle flange;
- (2) U.S. standard 115-V rated internal lighting system and rubber mounted anti-vibration pads (UL approved);
- (3) Tower protection coating system (paint)
- (4) internal ladder and safety cables with anti cable-slap hooks which are all pre-installed in Tower;
- (5) Tower internal mounting and ladder hardware fastened with ny-lock nuts;
- (6) rubber anti-vibration pads for Tower hatches;

(7) Tower name plate with manufacturing details such as manufacturing date, material types, weights, reference documents, serial number, etc.;

(8) Tower doorway equipped with positive latch-open device, door handle and padlock latches;

3. Supporting foundation

A supporting foundation must be built in order to secure the turbine and the electrical works. The foundation provides a secure, level base to anchor a structure, ensuring the structure will remain immobile and not move or topple when exposed to wind, frost heaves, etc.

III. ISSUE

Are sales of machinery used to construct the wind turbine, the tower and its components and the supporting foundation exempt from Massachusetts sales tax under G.L. c. 64H, § 6(s)?

IV. RULING

For reasons discussed below, we rule that for purposes of G.L. c. 64H, § 6(s), the wind turbine, the tower and its components, as well as its supporting foundation qualify as machinery that is used directly and exclusively in furnishing electricity that is delivered to consumers through mains, lines or pipes. Accordingly, Taxpayer's purchase of the turbine and related items described in section 1 are exempt from sales tax. With respect to the tower and related items listed in section 2, we rule that with the exception of the tower name plate described in section 2(a)(7), the purchase of items described in section (2) above, are exempt under G.L. c. 64H, § 6(s). Sales of any other machinery used in the construction of the wind turbine, tower, or foundation are not exempt from sales tax under G.L. c. 64H, § 6(s) unless such machinery becomes a part of the integrated and synchronized system that furnishes the electricity to consumers.

V. DISCUSSION

Massachusetts imposes a 6.25% sales tax on all retail sales, which include rentals of tangible personal property, in Massachusetts, unless otherwise exempt. See G.L. c. 64H, § 2. A complementary use tax is imposed on tangible personal property purchased for storage, use or consumption in Massachusetts, unless otherwise exempt. See G.L. c. 64I, § 2.

The exemptions from sales tax are found in G.L. c. 64H, § 6. Under G.L. c. 64H, § 6(s), sales of machinery or replacement parts used directly and exclusively in ". . . the furnishing of power to an industrial manufacturing plant; or in the furnishing of gas, water, steam or electricity when delivered to consumers through mains, lines or pipes" are exempt from sales tax. For purposes of G.L. c. 64H, § 6(s), the Massachusetts Supreme Judicial Court has defined "machinery" as "any combination of mechanical means designed to work together so as to effect a given end." *Warner Amex Cable v. Board of Assessors*, 396 Mass. 239, 242 (1985). The Massachusetts Appellate Tax Board has defined "machinery" as:

A mechanical, electrical or electronic device designed to be used and which is used in manufacturing, converting or processing tangible personal property to be sold. It includes not only the basic unit but also any adjunct or attachment necessary for the basic unit to accomplish its intended function. It also includes all devices used or required to control, regulate or operate a piece of machinery, provided such devices are directly connected with or are an integral part of the machinery and are used exclusively for the purposes mentioned.

Western Electric Co., Inc. v. Commissioner of Revenue, A.T.B. Docket No. 113779 (1984).

The Commissioner has not ruled specifically on the Massachusetts sales and use tax treatment of machinery purchased to build a wind turbine used to generate and furnish electricity under the facts you present. However, the Commissioner has issued a number of letter rulings that have examined various clauses of § 6(s) to determine whether purchases of certain items of tangible personal property and machinery qualified for exemption under somewhat similar scenarios. See, e.g., Letter Rulings 05-2 (Water Desalination Plant); 84-85 (Waste Processing Plant); 79-6 (Machinery Used to Furnish Electricity).

In Letter Ruling 05-2, the Commissioner ruled that exemptions in G.L. c. 64H, §§ 6(r) and (s) for materials, tools, fuel, machinery and replacement parts in the context of furnishing water extend to all items that operate harmoniously to make an integrated and synchronized system. *Id.*, citing *Lowell Gas Co. v. Commissioner of Corporations and Taxation*, 377 Mass. 255, 260 (1979). There, the Court held that pipes, meters, production, storage and pressure regulating equipment were all integral components required in the company's system, and were all exempt from sales and use tax as machinery used directly and exclusively in the furnishing of gas. The Court also held that certain "meter installations" (structures of wood and metal which supported a gas meter or by means of which a gas meter is attached to a wall) were included in the definition of machinery used in furnishing gas to consumers.

In evaluating the part of G.L. c. 64H, § 6(r), (s) that exempts items that "are consumed and used directly and exclusively in the furnishing of gas, water, steam or electricity when delivered to consumers through main, lines or pipes. . . .", we also noted in Letter Ruling 05-2 that this part of the exemption is less restrictive than the exemption for items used "in an industrial plant in the actual manufacture of tangible personal property to be sold." Compare *Lowell Gas Co. v. Commissioner of Corporations and Taxations*, 377 Mass. 255, 259 (1979) (finding that the furnishing of gas denotes operations that are distinct from such terms as "manufacturing" and "production", used elsewhere in the same exemptions; the term "furnishing" includes the distribution function) with *Associated Testing Laboratories, Inc. v. Commissioner of Revenue*, 429 Mass. 628, 630 (1999) (delineating the five elements of the "manufacturing" piece of the exemption, including that the exempt items must be used in actual manufacture, conversion, or processing).

We find, under the rationale of Letter Ruling 05-2, that the § 6(r) and (s) exemptions extend to many of the components of the turbine, tower, and foundation at issue. We base this, in part, on the decision in *Niagara Mohawk Power Corp. v. Wanamaker*, 286 App. Div. (N.Y.) 446, 449 Judicial Court^[2]. There, the Supreme Court of New York addressed the application of New York sales tax and use tax to various pieces of equipment, as well as various structures comprising a steam generating plant. It found, in pertinent part, that transformers, substations, towers, conductors and similar equipment were used in the transmission of electricity. It also found that various structures at the steam plant, including foundations and superstructure, which supported and braced the machinery contributed continuously and vitally to the production of electricity and were therefore exempt from New York sales and use taxes.

Like the meter installation structure in *Lowell Gas*, we find that the tower here operates harmoniously with the exempt turbine to form an integrated and synchronized electricity furnishing system. To the extent that the tower and its component parts are adjuncts or attachments necessary for the turbine to furnish the electricity to consumers through electrical lines, or to the extent that they are used or required to control, regulate or operate the turbine, the tower and its components qualify as machinery consumed and used directly and exclusively in furnishing electricity to consumers through mains, lines, or pipes under G.L. c. 64H, § 6(s). Here, 5% of the electricity will be sold directly to a particular consumer, while the remainder will be sold to a local utility for use by other consumers. This does not alter the fact that all of the electricity is furnished directly and exclusively to consumers through mains, lines, or pipes". The phrase "when delivered to consumers through mains, lines or pipes" is intended to distinguish entities that employ main, pipe, or line delivery systems from those that use bottling or other delivery systems. See *Letter Ruling 05-2*, citing *Lowell Gas Company et al. v. Commissioner of Corporations and Taxation*, 377 Mass. 255, 259 (1979) and *Tennessee Gas Pipeline Co. v. Commissioner of Revenue*, Appellate Tax Board (Docket Nos. 171876-171879 and 194866-194869) (1998). We conclude that the items described in section 2(a), 2(a)(1), (2), (4), (5),

(6), and (8) meet these requirements. The other items do not.

With respect to the foundation, we conclude that like the foundation at issue in *Niagara Mohawk Power Corp.*, the foundation also qualifies as machinery, since it is an adjunct necessary for the exempt turbine and tower to accomplish their intended function.

Significantly, however, items that are used by a contractor or its subcontractors in fulfilling their obligations under the contract that do not become part of the electricity furnishing apparatus are not exempt from tax; a contractor and its subcontractors are considered the users of such materials, tools, fuel, machinery and replacement parts, and are liable for the tax on such items. See Letter Ruling 05-2; *Ace Heating Service, Inc. v. State Tax Commission*, 371 Mass. 254, 256 (1976). See also G.L. c. 64H, § 6(r), (s). Such items would include machinery and replacement parts, materials, tools and fuels that are not physically incorporated in the plant or are not used in the actual furnishing of electricity, or that are consumed and used before the project begins furnishing electricity to consumers. See Letter Ruling 05-2. For example, a contractor will be liable for sales tax on erection cranes, support cranes, bulldozers, motor vehicles and other machinery used during the construction phase of the wind turbine, tower, and foundation before the apparatus is actually generating and furnishing electricity.

In Letter Ruling 79-6, the Department examined whether purchases of certain machinery by a contractor who was engaged by the purchaser to build a hydro-electric plant were subject to tax. Upon completion of the project, the entire electrical output was to be sold by the purchaser to a power company. The power company resold the electricity to retail utilities which, in turn, delivered it to ultimate consumers. Based on those facts, the Commissioner ruled that the sale of machinery used in the furnishing of electricity was exempt from sales tax under the clause exempting sales of machinery used in the furnishing of electricity when delivered to consumers through mains, lines, or pipes, and was also exempt from use tax under G.L. c. 64I, § 7(b).

In Letter Ruling 84-85, the Commissioner examined whether a contractor's purchase of certain items that were incorporated into or used in connection with a waste-processing plant and a steam and electricity generating plant were subject to tax. The Commissioner concluded that purchases of ancillary and miscellaneous equipment were exempt "provided that such equipment was an adjunct or attachment necessary for the exempt machinery to accomplish its intended function, or a device used or required to control, regulate or operate exempt machinery and directly connected with or an integral part of such machinery." *Id.* On the other hand, the contractor's purchases of an oil tank and the building materials from which a receiving shed and the enclosure for a boiler were to be built (including the structural steel and supports) were subject to the sales or use tax.

VI. CONCLUSION

Based on the facts presented and the analysis set forth in the authorities cited in this ruling we conclude that the wind turbine qualifies as "machinery" used directly and exclusively in the furnishing of electricity to consumers through mains, lines or pipes. We further conclude that the tower, its components and the foundation also qualify for exemption since they are either adjuncts or attachments necessary for the wind turbine to accomplish its intended function or, alternatively, are used to control, regulate or operate the wind turbine.

With respect to any other machinery required to build the wind turbine, tower or foundation, such machinery is exempt only if it becomes a part of the integrated and synchronized system that furnishes the electricity to consumers. To be eligible for exemption, machinery and replacement parts must also satisfy the test of being used directly and exclusively in the furnishing of electricity. To the extent the machinery used to construct the wind turbine, tower, or the supporting foundation does not meet these requirements, it is not exempt under G.L. c. 64H, § 6(s). For example, machinery such as erection cranes, support cranes, and bulldozers are subject to tax.

Very truly yours,

/s/Navjeet K. Bal

Navjeet K. Bal
Commissioner of Revenue

NKB:MTF:wrđ

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[1] The legal basis for this “net metering” is the Green Communities Act. St. 2008, c. 169. The Massachusetts Department of Public Utilities (DPU) implements this legislation, specifically per their tariffs nos. ***** and ***** . Per the DPU tariffs, Taxpayer has executed an Interconnection Service Agreement with Local Utility and Local Utility has approved Taxpayer’s “Schedule Z” for net metering status. Competitive grant support is provided by the Massachusetts Renewable Energy Trust (MRET) and U.S. Department of Agriculture (USDA).

[2] See e.g. *Courier Citizen v. Commissioner of Corporations and Taxation*, 358 Mass. 563, 571 (1971); *Rowe Contracting Company v. State Tax Commission*, 361 Mass. 158 (1972); *Commissioner of Revenue v. V.H. Blakinton & Co.*, 420 Mass. 259 (1995). See also Letter Ruling 05-2.